









It's easy to get overwhelmed by all the choices in the modern kit airplane market. There are wood planes, composite planes, steel-tube planes and aluminum planes. There are planes for every possible aerial pursuit; bush planes, aerobatic planes, fast planes, low-and-slow planes. Seemingly limitless numbers of companies will all tell you they are the best at what they do.

You might be enthralled with the idea of building your own airplane, but the process seems very complicated. Which airplane is "the best?" You know building can be a long process; what if you start but aren't able to finish? Will the finished craft have such intimidating handling characteristics that you are afraid to fly it?

Zenith Aircraft Company, we don't believe building



your own airplane has to be a complicated pursuit. Our airplanes aren't the absolute fastest (although some do move right along). They arguably aren't the prettiest. (We say pretty is as pretty does, aka "form follows function"). They do take off and land shorter than most while carrying full-size people and baggage. Standard tricycle gear with a steerable nosewheels keeps ground handling easy. Very low stall speeds and predictable characteristics make them friendly for the recreational pilot in the air. But most importantly from a builder's perspective, they are all specifically designed to be simple and easy to assemble for the first-time kit builder. You will hear sad stories about half-finished airplanes languishing in basements or garages. You will not find many Zenith aircraft among them!

New CNC (Computer Numerical Control) technology nearly eliminates the need for jigs and fixtures. Building one of our modern match-drilled final-hole-size kits is extremely different from the homebuilding experience of the past. At one time, builders received some bent pieces of aluminum and measured, marked, drilled, and riveted until they had a complete airplane. Our kits are increasingly match-drilled to final hole size, which means all the rivet holes are in just the right spot, and

drilled to the final size. All you have to do is rivet the parts together!

We believe our comprehensive airplane lineup offers the ideal balance of cost, ease of building and performance for the first-time amateur builder. You will find everything from a zippy low-wing craft perfect for weekend touring to a heavy duty STOL (short takeoff



and landing) beast ideal for backcountry campouts, with several models in between.

Our kits all meet the requirements for the FAA "experimental" category, the fastest growing segment of new aircraft in the United States. Every newly-completed kit aircraft is inspected by the FAA or by an FAA-designated inspector (DAR) before being issued a certificate of airworthiness.

As the builder and owner of a kit aircraft you have the ultimate freedom to build the airplane that meets your requirements and desires. The project becomes a reflection of you as you custom build your own airplane with the equipment and features that you choose. You have access to the latest technology that the homebuilt industry has to offer, yet you can also choose the proven simplicity of a basic old-school aircraft engine and "steam" gauges. Once your plane is complete, you will have a brand new custom-built aircraft, with the freedom to do your own maintenance and inspections (potentially saving you thousands of dollars every year).

Since 1992 Zenith Aircraft Company has been helping builders just like you make their dreams of flight come true. Imagine yourself in your own workshop, assembling the parts that will become an airplane you built with your own two hands. Imagine yourself on a sunset flight with a loved one, or soaring down through the early morning mists to a secluded camping spot. Read the rest of this magazine to learn more, and then come visit us at the factory, centrally located in Mexico, Missouri, to see (and fly) a Zenith aircraft for yourself.

Zenith Aircraft Company Models

2020 edition

STOL CH 750 SUPER DUTY

The newest addition to the Zenith fleet is the most capable plane ever to roll out of the Zenith factory. An 800 pound useful load and capacious baggage area with rear jump seat make it the most heavy duty Zenith yet. Powerful engine options ensure it retains the legendary Heintz-design STOL performance, and the spacious cabin gives lots of room with a breathtaking view once you're in the air.

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STOL CH 750

The popular STOL CH 750 is a proven mainstay of the Zenith lineup. Designed to maximize STOL performance and load carrying capacity under the Sport Pilot / Light Sport Aircraft category, it is easily operated out of a backyard grass strip. The progenitor of the STOL CH 750 Super Duty, the STOL CH 750 remains quite capable in its own right and a great option for pilots who want to use more economical engines.

Page

CH 750 CRUZER

For those who love the spacious cabin and easy building of the STOL CH 750, but usually operate in the civilized environs of a paved airport, we offer the CH 750 CRUZER. It offers greater speed and little more "normal" feel, while not giving up the easy in and out access of a high-wing aircraft, and still retaining guite respectable takeoff and landing distances.

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The little workhorse that started the Christ Heintz STOL line is still going strong more than thirty years later. If getting into the shortest runways possible is your mission, this plane excels. Getting airborne in as little as 90 feet at gross weight, the original "Sky Jeep" is still doing what it does best. It is also a good fit with many European recreational aviation regulations.

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With a cruise speed of 135 mph, the CH 650 is the fastest aircraft Zenith offers. Whether you take friends and family to far-off destinations or for local pleasure flights, the CH 650 excells, offering excellent cross country performance while maintaining the ability to operate out of a grass strip. No matter what your mission, the exceptional unrestricted visibility through the expansive bubble canopy will take your breath away. Page 18







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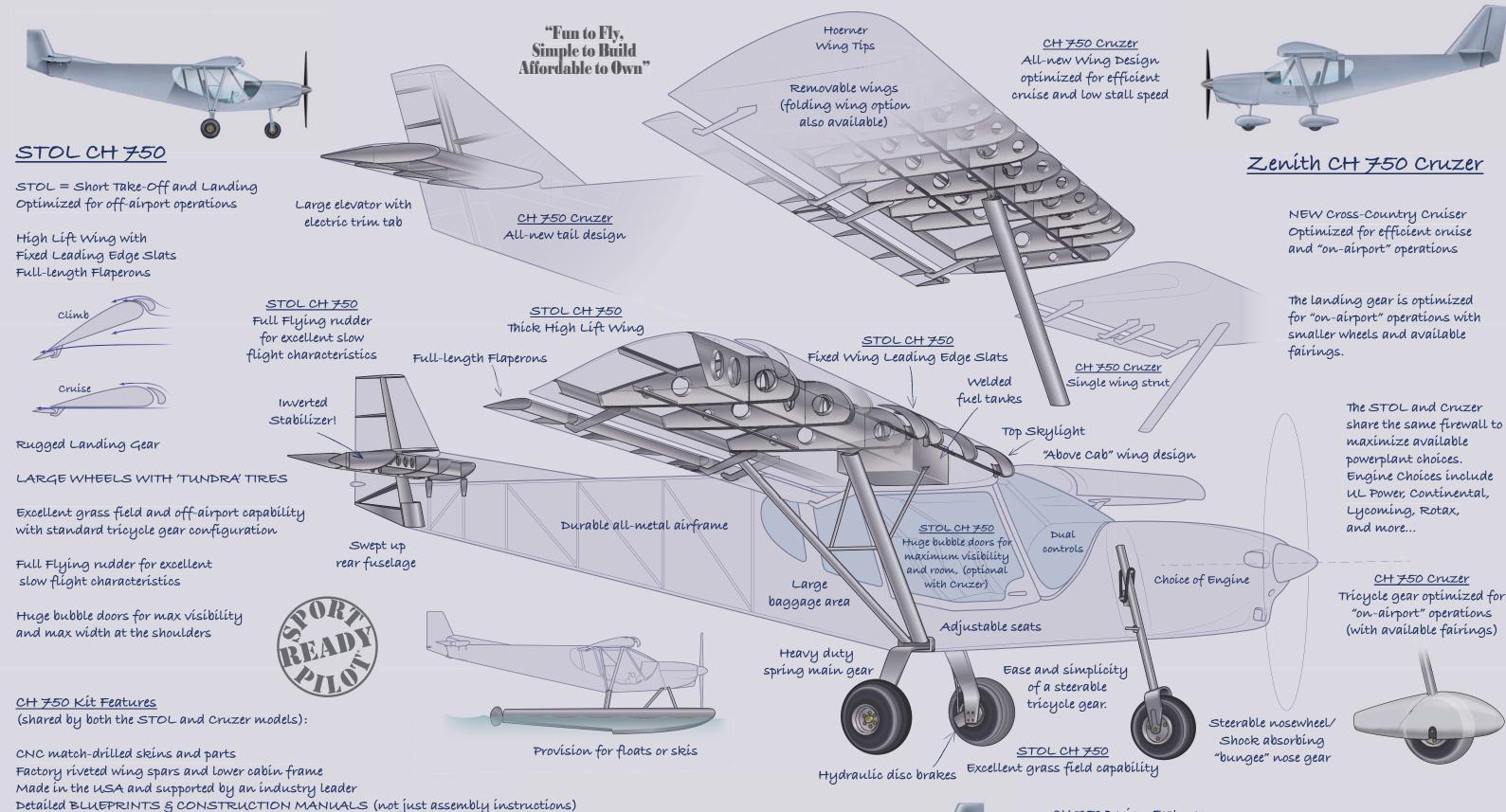












Dual Swing-up Doors

Easy Cabin Access!

Extensive builder support network including Zenith. Aero online community

Modular Construction Minimizes workshop space requirements LIFETIME TECHNICAL SUPPORT FROM THE FACTORY

Welded wing tanks (supplied ready to install in the kit)

Kit includes wheels, tires, hydraulic brakes

Kit includes seatbelts with shoulder harness.

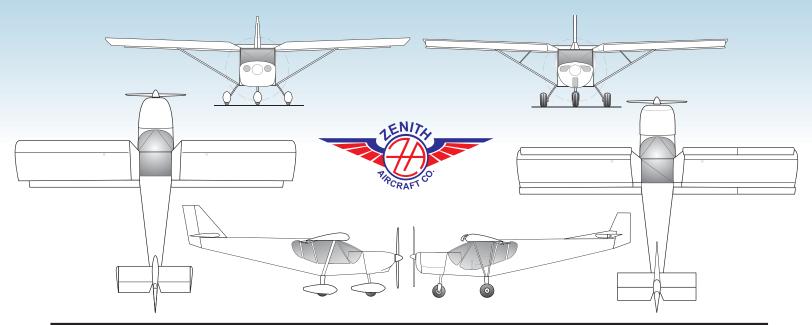
Acrylic (plexiglass) windshied and door windows

CH 750 Design Features

Based on a professional and very proven design (since 1986)

Huge Cabin with bubble doors (optional with Cruzer)
Large baggage area
Fully Adjustable Seats
Large Swing-Up Doors for Easy Cabin Access
Cabin Access from either side
Fantastic Visibility! Superb forward and downward visibility

Zenith CH 750 Series PERFORMANCE AND SPECIFICATIONS



STOL CH 750 SPORT UTILITY KIT AIRPLANE

		1	
SPECIFICATIONS	NEW CH 750 SUPER DUTY	Sport Pilot ready STOL CH 750	The Faster CH 750 CRUZER
LENGTH	22 Ft. 0 In.	21 Ft. 10 In.	23 Ft. 6 In.
HEIGHT (rudder tip)	9 Ft. 0 In.	8 Ft. 8 In.	9 Ft. 2 In.
WING SPAN	33 Ft. 5 In.	29 Ft. 9 In.	29 Ft. 9 In.
WING AREA	162 Sq. Ft.	144 Sq. Ft.	144 Sq. Ft.
WING CHORD	4 Ft. 10 In.	4 Ft. 10 In.	4 Ft. 11 In.
HORIZONTAL TAIL SPAN	10 Ft. 1 In.	8 Ft. 5 In.	7 Ft. 8 In.
EMPTY WEIGHT	1,100 Lbs.	775 Lbs.	780 Lbs.
GROSS WEIGHT	1,900 Lbs.	1,320 Lbs. LSA Limit	1,320 Lbs. LSA Limit
DESIGN GROSS WEIGHT	1,900 Lbs.	1,440 Lbs.	1,440 Lbs.
USEFUL LOAD	800 Lbs.	545 Lbs. / <i>665 Lbs.</i>	540 Lbs. / <i>660 Lbs.</i>
FUEL CAPACITY (Standard)	50 US Gal.	24 US Gal.	30 US Gal.
WING LOADING	11.7 Lbs./Ft. ²	9.15 Lbs./Ft. ²	9.3 Lbs./Ft. ²
POWER LOADING (with typical engine)	9.25 Lbs./BHP	13.20 Lbs./BHP	10.15 Lbs./BHP
DESIGN LOAD FACTOR	+6 / -3 G Ultimate	+6 / -3 G Ultimate	+6/-3 G Ultimate
CABIN WIDTH (Shoulders, without bubble doors)	42 Inches	42 Inches	42 Inches
NEVER EXCEED SPEED (VNE)	140 MPH	125 MPH	145 MPH
SUITABLE POWER / Max Engine Weight	150 - 205 hp	100 - 150 hp / 350 lbs.	100 - 150 hp / 350 lbs.
PERFORMANCE at Gross Weight	CH 750 SUPER DUTY	STOL CH 750	CH 750 CRUZER
Engine (as tested, other engines available):	IO-375 - 205 hp @ 2500 rpm	Jabiru 3300 - 105 hp @ 2950 rpm	UL350iS - 115 hp @ 2900 rpm
TAKE-OFF ROLL	115 Ft.	100 Ft.	350 Ft.
LANDING ROLL	150 Ft.	125 Ft.	350 Ft.
MAX. LEVEL SPEED	115 MPH	105 MPH	125 MPH
CRUISE SPEED (75%)	105 MPH	100 MPH	118 MPH
STALL SPEED (Flaps Down)	34 MPH	35 MPH	39 MPH
RATE OF CLIMB	1,350 fpm	1,000 fpm	1,200 fpm
SERVICE CEILING	15,000+ Ft.	14,000+ Ft.	14,000+ Ft.
RANGE (Standard, no reserve) - ENDURANCE	420 miles 4 Hours	350 miles 3.5 Hours	420 miles 3.5 Hours





































STOL CH 701

"Simple to Build,
Fun to Fly"
-KITPLANES magazine

First introduced in 1986, the STOL CH 701 aircraft was the first Chris Heintz STOL design. Smaller and lighter than the STOL CH 750, short-field performance is where the STOL CH 701 aircraft truly excels: At gross weight it is airborne in less than 120 feet of unprepared grass, or 90 feet of hard surface, less than four seconds after brakes-off. Of course, any headwind shortens the time and distance required.

Not many of the more than 1,000 STOL CH 701s flying today can be found at airports; most are operated from short off-airport grass fields. The aircraft's all-metal construction makes it suitable for continuous outdoor storage, providing owners with continuous cost savings

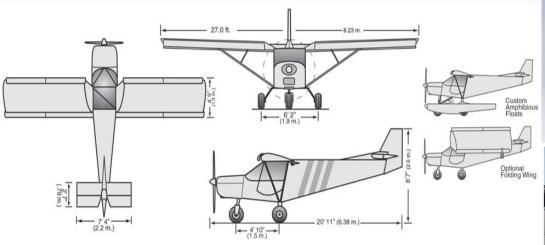
PERFORMANCE & SPECIFICATIONS

(no hanger or tie-down fees).

PERFORMANCE with Rotax 912S - 100 hp	Single	Dual	SPECIFICATION FIGURES Standard Configuration		
TAKE-OFF ROLL	60 Feet	90 Feet	LENGTH	20 Ft. 11 In.	6.38 m.
TOP SPEED	95 MPH	95 MPH	HEIGHT	8 Ft. 7 In.	2.6 m.
CRUISE SPEED (75%)	85 MPH	85 MPH	WING SPAN	27 Ft. 0 In.	8.23 m.
STALL SPEED	28 MPH	30 MPH	WING AREA	122 Sq. Ft.	11.4 m.sq.
RATE OF CLIMB	1,600 fpm	1,400 fpm	EMPTY WEIGHT	580 Lbs.	263 kg.
SERVICE CEILING	16000+ Ft.	14000+ Ft.	GROSS WEIGHT	1,100 Lbs.	500 kg.
RANGE (no reserve)	400 miles	400 miles	USEFUL LOAD	520 Lbs.	236 kg.

STOL CH 701 Light Sport Aircraft

The STOL CH 701 was not designed to be just another "pretty" light aircraft, but was engineered to offer outstanding short take-off and landing performance, allmetal durability, and unparalleled ease of construction. With form following function, the STOL CH 701 looks like the "Sky Jeep" it is.



The Ch 701 is the smallest and lightest kit airplane currently sold by Zenith Aircraft Company. For someone who needs the utmost STOL performance, the 701 offers the shortest takeoffs and landings of any Zenith aircraft design. It also fits under many European Microlight and Ultralight regulations. The kit is quick to build, although not quite as fast as the more modern final hole size kits such as the CH 750 Super Duty.

















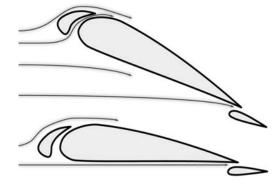




With form following function, the entire Zenith line of STOL airplanes look like the short take-off and landing sport utility aircraft they are. The STOL series kit aircraft are based on aeronautical engineer Chris Heintz's vast design experience in order to provide the best in performance, cost, reliability, and ease of construction.



These modern aircraft make use of advanced technologies, while using simple systems and structures for easy assembly and maintenance. They are thoroughly professional designs, having undergone complete, rigorous stress analysis and flight testing. Developed for the demanding recreational pilot and first-time builder, the aircraft maximize flight performance and efficiency while still being easy to build. Simple systems, modern materials, and design ingenuity minimize required maintenance, and make Zenith STOL kit planes simple, affordable, and very durable.



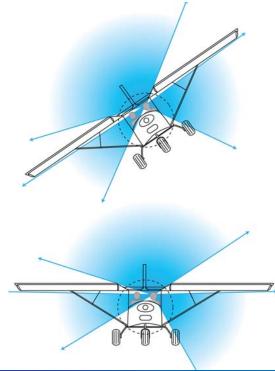
The STOL series use a special airfoil design to achieve very high lift, low stall speeds, and high wing strength. A thick wing, full-length leadingedge slats and trailing-edge flaperons develop a maximum wing lift coefficient of 3.10, while maintaining a short wingspan for maximum strength and ground maneuverability. The leadingedge slats allow the aircraft to fly at a high angle of attack (and thus a lower speed) by accelerating the air between the slat and the wing, allowing steep climb angles of up to 30 degrees. The slats do not retract; they remain in a fixed position in all flight attitudes for maximum reliability and construction simplicity. The full-length flaperons act as both full-span ailerons and full-span flaps. The flaperons have their own airfoil, and are hung below the wing trailing edge to supply them with fresh, undisturbed air for maximum control effectiveness even at low speeds.



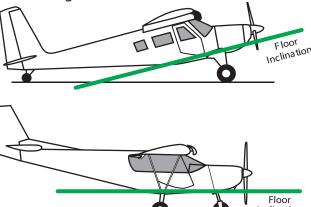
Pilot and passenger visibility is an important element of aircraft design, but often overlooked. Good visibility is especially important for the pilot of a STOL aircraft because of the low-altitude obstacles that may be encountered in bush flying. Passengers need good visibility to enjoy low and slow flying; they don't want a small window the same size as in a commercial jetliner.

While an open cockpit provides unobstructed visibility, bugs, wind, and cold air all dictate that an enclosed cockpit is best to provide the minimum level of comfort expected from a modern design. An enclosed cabin also allows for good ventilation and heat, and protects avionics and baggage. The large, bubble doors of Zenith STOL aircraft provide easy access to the cockpit, along with increased elbow room and helicopter-like visibility.

A high-wing configuration is the best choice for a STOL aircraft because of the unobstructed downward visibility it provides. This enables both enjoyment of the views provided by low and slow flying and safe operation into unimproved strips with potential low-altitude obstructions. In contrast to many designs, in which the wing root directly obstructs the pilot's sideways visibility, Zenith STOL aircraft have the wing located above the cabin. This design ensures the maximum visibility possible for a high-wing configuration.



In addition, upward visibility is improved by decreasing the wing thickness at the inboard end where it meets the cabin. The top of the cabin can thus be fitted with a full window, which increases visibility in the steep bank angles the aircraft of which the aircraft is capable, along with raising the height of the cabin for greater comfort.



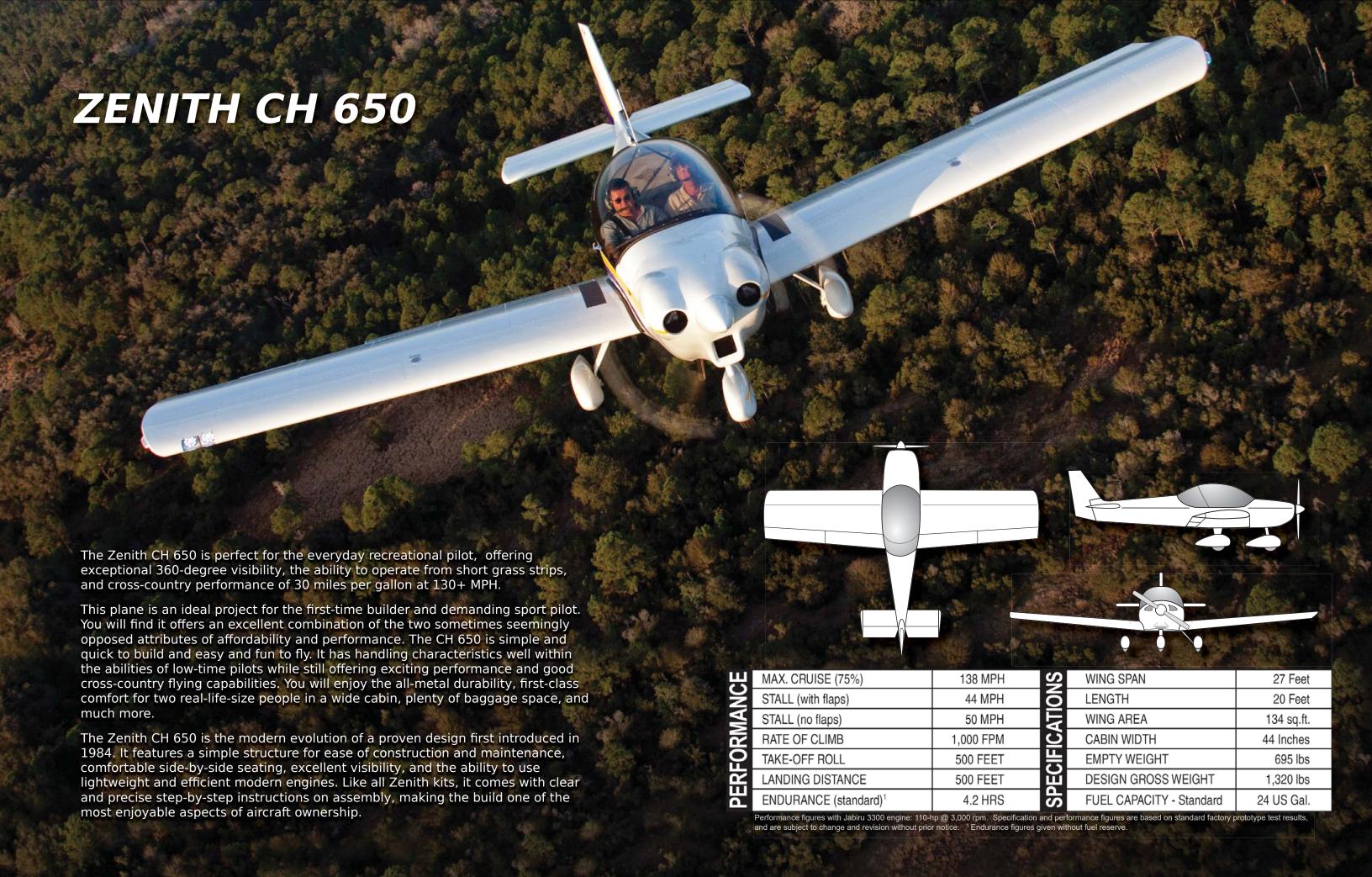
An additional benefit of this tapered abovecab wing configuration is its smaller frontal area, which causes less drag and gives a faster airplane for the same amount of power. It also results in excellent controllability at low speeds because the air stream to the rudder is not disturbed by passing over the wing. The side-by-side seating arrangement (common to most modern aircraft) maximizes pilot and passenger comfort. The cabin is designed throughout to offer good ergonomics, as well as being easily adaptable to a builder's desired interior configuration.

Another design feature of Zenith STOL aircraft is rugged tricycle gear with a steerable nosewheel. This configuration is familiar and straightforward for newer pilots, but it also has other significant advantages. When a plane with tricycle gear is on the ground its wing has a neutral angle of attack, so it is more stable and less affected by wind while parked or taxiing. Additionally, the cabin floor is level with the ground, as opposed to the inclined floors inevitable in

taildragger configurations.

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In 1984, Chris Heintz developed a low cost, lightweight trainer aircraft with excellent performance, yet behavior docile enough that low-time and student pilots could easily fly the aircraft with a minimum of adaptation from whatever they flew previously.

The Zenith CH 650 is a modern evolution of this design. It has come a long way, yet the original philosophy remains the same; the CH 650 continues the tradition of designs that are simple, fast, and affordable to build without sacrificing performance and cross country capability.

Modern engines and avionics make it easier than every to outfit the Zenith CH 650 as a serious cross-country cruiser that can be flown with a Sport Pilot license.



The spacious CH 650 cabin.





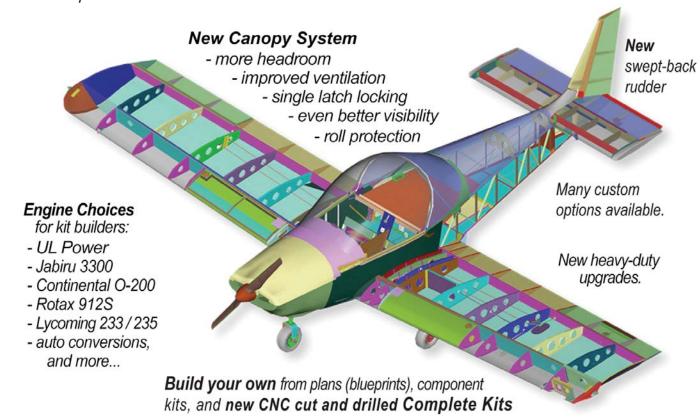
Simple systems and components along with design ingenuity make the CH 650 uncomplicated to build and fly, affordable, and straightforward to maintain. All-metal construction makes outdoor storage practical and the wings are easily removable if the aircraft ever needs to be trailered.

The ergonomically designed 44 inch wide cabin is large enough to comfortably accommodate two large adults, even on long cross-country flights. A large bubble canopy provides spectacular 360-degree visibility, opening forward to allow easy access from both sides. The main baggage compartment is located behind the seats and is more than sufficient to hold overnight bags; optional wing lockers further increase baggage space.





The Zenith CH 650 B is a second generation light-sport aircraft, with many improvements from the previous CH 650 A model.

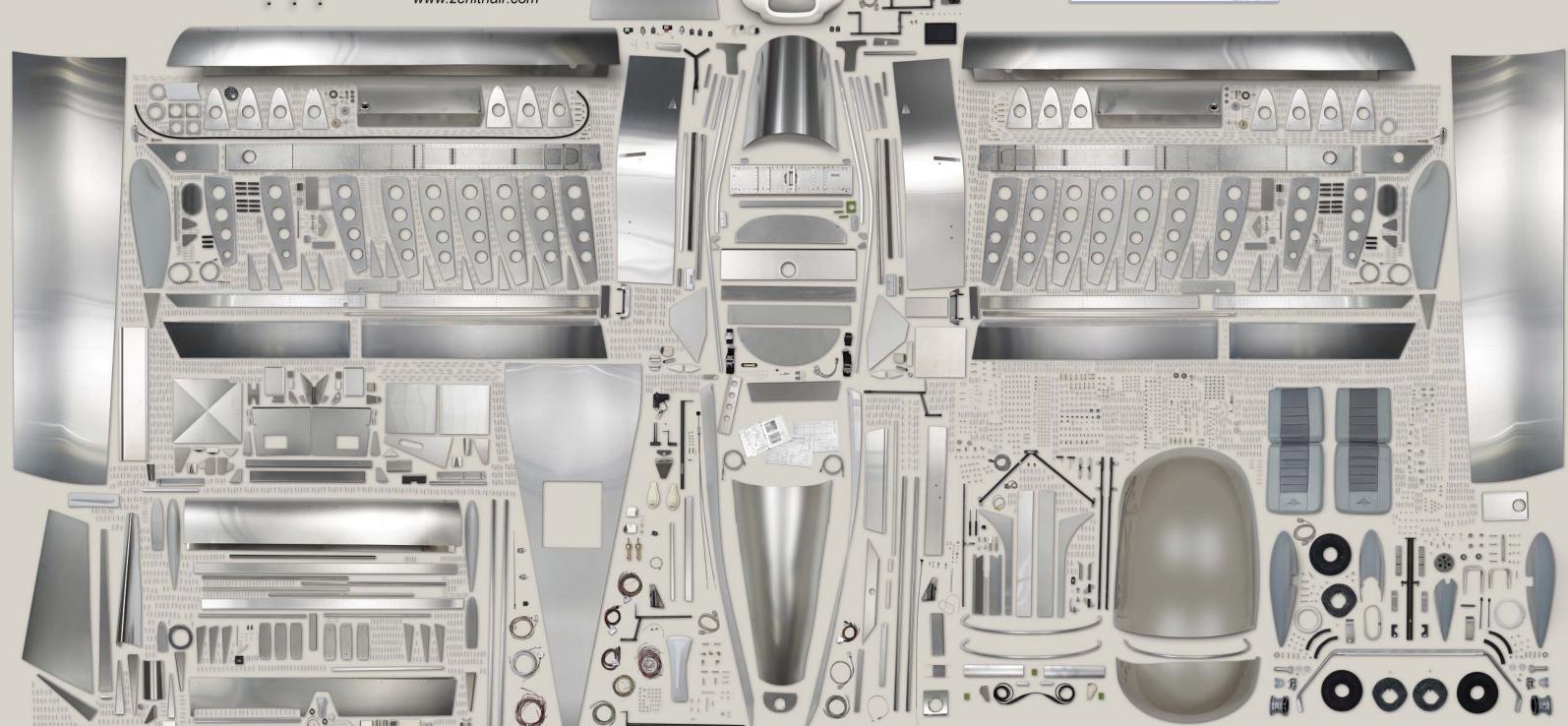












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BUILDING A ZENITH KIT

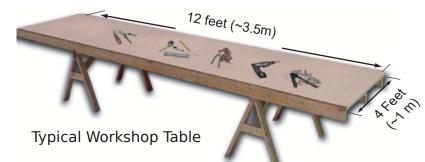
Zenith aircraft kits have been developed specifically to make things easy for the amateur builder. The philosophy behind the kit is to supply all the parts ready to put together using only simple hand tools and easily acquirable skills. All parts that require welding, solid riveting, or other specialized skills and tools are completed here at the factory. In the early days of homebuilding the builder of a sheetmetal airplane would first have to fabricate all the parts, and only then begin to assemble them into an actual airplane. That is not the case with Zenith's modern kits. we build the parts; you build the airplane.

TOOLS: You will only need simple hand tools, so there is minimal cost investment in tooling. Most builders already have most of the required shop tools.

WORKBENCH: Nearly all the assemblies, including the large wing, tail, and fuselage sections, can be built on a basic workbench table. A flat, level workbench is the main assembly "jig" required, saving the builder the time and cost of fabricating assembly jigs.

WORKSHOP: The required workshop space is minimal due to the modular construction of the Zenith kit that lets you build each section of the kit one at the time. Many builders construct most of the kit in a single-car garage or basement workshop.

Zenith Aircraft kits are well-suited for building in a home environment, as there is no need for specialized ventilation or temperature or dust control (as with composite construction). The building process is relatively quiet (no noisy pneumatic rivet hammers are required).



"The proven all-metal construction requires only basic tools and clecos to hold sections together. The use of Avex pull-type rivets greatly reduces the challenges associated with other forms of riveting." $_{-\text{Aviation Quarterly}}$

"Attention to small details ensures that the kit can easily be completed... the ribs are not only shaped, but the lightening holes are made, beveled and smoothed to a finished state. Look at other kit manufacturers for this attention to detail. The builders of some of the 700 flying planes I've had a chance to interview tell me the company time estimates are valid and the support is unsurpassed." - Recreational Flyer magazine



Measuring & Marking Tools





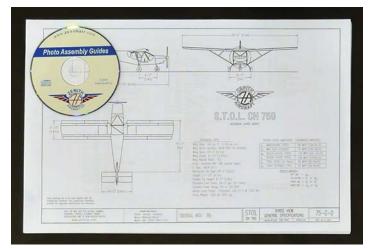
Cleco Temporary Fasteners



Hand Riveter for Zenair Rivets



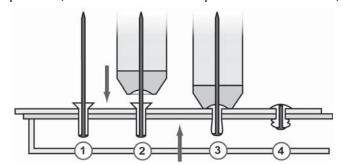
Sheet-Metal Snips for Trimming



Every kit includes a complete set of drawings and manuals, with 11"x17" CAD drawings and a digital copy of the detailed step-by-step instructions.

All necessary hardware, sorted and clearly labeled, is included with the kit. Every option kit also includes all mounting and installation hardware.

The parts in the kit are fastened together with Zenith's proven riveting method using Zenair blind rivets, which are as easy to set as pop rivets and only require a simple hand rivet puller. (You can also use a pneumatic riveter).

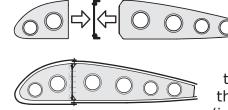








The 6061-T6 aluminum wing ribs are supplied ready-to-assemble, preformed and finished at the factory with flanged lightening holes.



Once the ribs have been riveted to the spar and the wing skeleton (internal structure)

is completed, the outer sheet metal skins are blind riveted to the spar and rib assembly.



Various option kits are also available, including complete firewall-forward engine packages, custom instrument and avionics packages, as well as complete tool kits.

Pictured here is a complete kit for the STOL CH 750. In accordance with Zenith's manufacturing philosophy, all the parts that require any special skills, machinery, or processes are finished at the factory, so when they get home all you need to do is basic assembly. All lightening holes are punched and flanged; all parts that require solid riveting are already done; all rib flanges are hand-finished to ensure solid contact with the skins. With over twenty-five years of kit manufacturing experience, Zenith Aircraft Company knows what it takes to produce a quality kit. Highly skilled crafts-people, modern production facilities, and quality materials come together to supply you with components that are the best in the industry.

We ensure that every kit is as truly complete as possible. The heavy-duty landing gear, hydraulic brake system, molded wing tips, control systems, welded aluminum fuel tanks, and more come standard. All rivets and hardware are supplied as part of the standard kit. Engine and avionics are highly individual choices, so we don't restrict builders' freedom by having a single standard package for these components, but many different engine and avionics options are available from the factory.



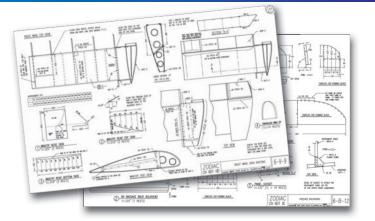
All the airframe sections are composed of relatively small parts, so Zenith kits can be packed efficiently and shipped around the world in approximately 4'x4'x14' crates. You can choose to have your kit shipped to you or pick it up at the factory. Clearly labeled and well organized, the kit arrives ready for inventory and assembly. Minimal space is needed until the final assembly of the airframe, as each section of the aircraft is built individually. Additionally, there's no need to worry about maintaining a pristine work environment or building complex jigs.

Of course, our relationship with you does not end when the kit shows up at your door. Direct factory support is always available just a phone call, email, or FAX away. Your questions will be promptly answered by the same professionals who built the kit. Additionally, you can join the active online community of Zenith builders around the world at **www.zenith.aero** and benefit from the vast amount of knowledge they have to offer. Before you know it you'll be the one telling someone how you built that pretty new Zenith aircraft!

BUILDING CHOICES

DRAWINGS AND MANUALS

Complete plans (blueprints) and assembly manuals guide the builder through the entire building process. They are detailed enough that they can even be used to scratch build the entire aircraft, if you should so desire. The 11"x17" CAD drawings illustrate the parts and assemblies and provide detailed information about every single component that makes up the kit. Each set of drawings and manuals comes with an aircraft serial number and entitles the builder to full factory technical support.



COMPLETE KITS

The most popular way to build a Zenith airplane is with the complete airframe kit, which provides the builder with all the components necessary to assemble an airplane. Easily picked up at the factory or crated and shipped, Zenith kits provide everything needed to complete the airframe, typically in under 500 hours.

Engine, instruments, paint and upholstery are not included in our kits, although engines, instruments, and upholstery packages are available from us separately.



BUY-AS-YOU-BUILD COMPONENT KITS

As an alternative to ordering the complete airframe kit all at once, you can purchase component kits for sections of the aircraft one at a time. This modular method of building reduces the upfront cost and commitment tied to full kits and increases the flexibility of the project. Any individual part or component is also available for individual purchase. On the right a complete tail kit is shown.



QUICK BUILD KITS

Providing an advanced level of pre-assembly, quick build kits further simplify kit construction in order to save the builder valuable time. With this option, the fuselage is pre-assembled and ready for the installation of systems such as engine and avionics. Made from the same quality parts, the only thing that changes with the quick build kit is the level of assembly.





ENGINE CHOICES

All models in the Zenith lineup are designed to provide good performance using minimal power. While all aircraft are designed within certain engine power and weight guidelines, Zenith designs are not based around any particular engine model or brand, maximizing the customer's choices about which powerplant to use. You can choose from among the next-generation modern aircraft engines, like the Rotax 912 and the UL Power series, which offer superior efficiency at a lower weight. Or, you may prefer the proven reliability and ubiquity of aircraft engines such as Continentals and Lycomings.

ROTAX 912 Series

With low operating costs and excellent power-to-weight ratios across the board, the Rotax 912 series of aircraft engines, ranging from 80 to 100 horsepower, are an exciting option for light sport aviators. The latest addition, the Rotax 912iS, continues to integrate modern technology, such as fuel injection and an engine management system, to complement Rotax's core values: outstanding performance combined with low fuel consumption.





UL POWER Series

The line of UL Power engines are developed specifically for use in light aircraft, and represent a truly modern design approach to light aircraft engines. Standard features include FADEC (Full Authority Digital Engine Control), multi-point fuel injection with automatic altitude compensation, and dual electronic spark ignition with variable timing. The direct drive, air cooled, and highly fuel efficient engines range from 97 to 130 horsepower, with an excellent power-to-weight ratio.

CONTINENTAL 0-200

Manufacturing aircraft engines since the 1930s, Continental Motors boasts a long history of performance and reliability. Today, the 100 horsepower O-200 is still one of the go-to engines for light-sport aircraft. While the O-200 is still available factory-new (including the lightweight D model), there is a large used market for Continental engines, with numerous sources for used engines, parts, and aftermarket upgrades and enhancements.



OTHER ENGINE CHOICES

Designed to provide maximum flexibility and freedom to the builder, Zenith aircraft are far from limited to the engine models listed above. Some other popular engine installations include the Jabiru 3300, the Lycoming O-235, and Corvair and Viking auto conversions.

Zenith Aircraft Company offers firewall-forward installation powerplant packages for the UL Power series, the Rotax 912 series, and the Jabiru 3300 engines, while supplying engine mounts, cowls, and accessories for various other engine models in order to best serve customers' needs. Other complete firewall-forward packages may also be available directly from the engine manufacturer or distributor.

INSTRUMENT CHOICES///

The large panel area of every Zenith aircraft offers a blank canvas for your ideal instrument layout. You can choose traditional "steam" gauges, modern glass displays, and everything in between. For many Zenith builders, designing and assembling their dream instrument panel is an important part of the kit aircraft experience.



A CH 750 panel featuring steam gauges side-by-side with an iPad.



A clean and simple instrument panel using the Dynon SkyView.



A more traditional panel and center console with a custom finish.



A complete Dynon SkyView instrument and avionics package available through Zenith.

If you desire a more "plug and play" option, Zenith also offers complete Garmin and Dynon instrumentation and avionics kits. We can even work with you to design your own custom instrument panel! Please call to get the latest pricing and options on the various packages we offer.

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UNPANEL

In addition to choices about the instrumentation with which you choose to outfit your panel, Zenith Aircraft Company also offers choices about the basic panel shape. We offer three different panels for our CH 750 aircraft. Builders can choose any of these options for any of the three CH 750 aircraft: the Cruzer, STOL CH 750, and the STOL CH 750 Super Duty.

CRUZER PANEL

The Cruzer panel is a wide "normal" panel, similar to those found in other light aircraft. It offers plenty of room for all the cross-country or IFR instrumentation you desire.



The STOL panel is narrower and offers more side and downward visibility across the nose, useful when operating at the very high angles of attack of which Zenith STOL aircraft are capable.

UNPANEL

The UnPanel is an innovative new system that dispenses with a traditional instrument panel entirely, replacing it with a single screen on an articulating mount, and opening up unbelievable visibility in the cockpit.







The three-way flexibility of the articulated mount allows the display to move side-to-side, front-to-back, and rotate about its vertical axis. The display can be positioned virtually anywhere in the cockpit: up close for you to program the radio; over in front of the right seat to show your passenger your route; or up against the panel, where it virtually disappears against the square feet of clear canopy that the absence of a traditional instrument panel exposes to view.



Imagine a plane with no instrument panel at all. Visibility would be unmatched, and legroom unparalleled. But you would still need flight information. Enter the UnPanel. The UnPanel replaces the ubiquitous instrument panel with your choice of an all-in-one avionics display attached to an 8-point articulated mount. It's the closest thing possible to leaving the instrument panel out.

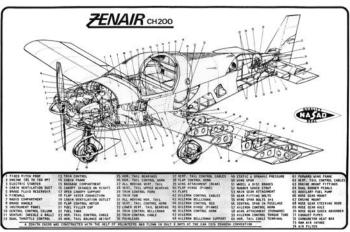
Whereas a traditional instrument panel can impede getting in and out of the airplane and generally clutter up the cockpit, the Unpanel opens up unprecedented leg room and gives the cockpit a light, airy, feel more reminiscent of a helicopter than a small airplane. Once you fly with an UnPanel, traditional panels will always seem to be blocking your view.

DESIGNER CHRIS HEINTZ



When you fly a Zenith Aircraft Company airplane, you are flying the product of Chris Heintz's six decades of experience in aircraft engineering and manufacturing. Heintz is a graduate of the E.T.H. Technical Institute in Switzerland. After serving

in the French Air Force, he went to work for Aerospatiale as a flutter engineer on the supersonic Concorde jetliner. He later attained the position of chief engineer at Avions Robin, where he designed several fully certified two and four seat production aircraft, using the allmetal construction that would later serve him well in the homebuilt world.



In the time he could spare from designing airplanes at work, Heintz was designing and building airplanes at home. The very first ZENITH (an anagram of Heintz) CH 200 was built in a little more than a year and flew in 1969. Since Heintz had designed the airplane to his own amateur-level building and fabrication abilities, the two-place low-wing airplane drew increasing amounts of attention from the homebuilt movement.



In 1973 Heintz moved his family (and the prototype CH 200) to Canada, where He worked in Toronto as a stress engineer on the De Havilland Dash 7 commuter. In 1974 he decided to found his own aircraft company, Zenair Ltd., and began manufacturing and selling kits from his two car garage. Over the years Heintz has brought more than 12 new designs to market through Zenair.



Now, several thousand kit planes designed by Chris Heintz are flying all around the world in 48 different countries. They have earned an excellent reputation among pilots, builders, the press, and aviation authorities for their durable all-metal construction, docile flight characteristics, reliability, and low maintenance requirements, as well as being honored with numerous awards.



Some Highlights from Chris Heintz's Career

1974: "Best New Design" (EAAC) for the prototype Zenith CH 200.

1976: Heintz leads the "8-Day Wonder" project at EAA Oshkosh, building (from a kit) and flying an entire aircraft in eight days!

1978: The Dr. A. Raspet Memorial Award "for outstanding contribution to the advancement of the design of light aircraft".

1984: "Best New Design" (EAAC) for the prototype ZODIAC CH 600.

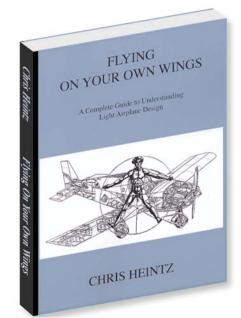
1999: Designer Chris Heintz inducted to EAA Hall of Fame.

2011: Chris Heintz is officially honored and recognized at the EAA AirVenture international fly-in convention for his many contributions to the industry.

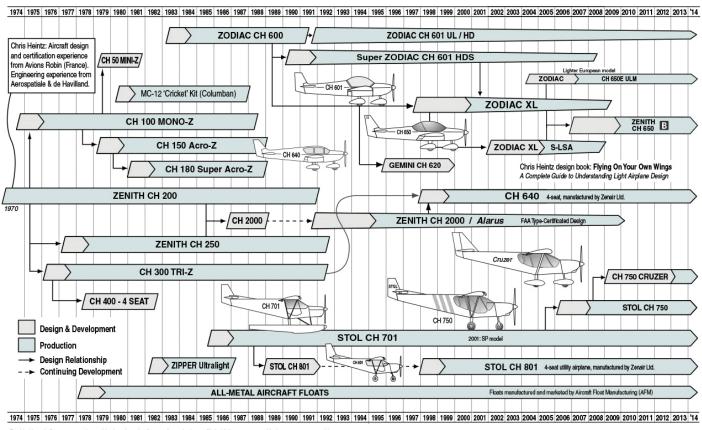
FLYING ON YOUR OWN WINGS

In the book FLYING ON YOUR OWN WINGS, Heintz shares his knowledge and insights into the art and science of light aircraft design. He walks readers through the essential understanding and skills required to conceive, develop, build and even test-fly their own personal light airplane. Basic

mathematics, essential aerodynamics and stress analysis are just a few of the chapters of this fascinating book. Heintz even provides a sample design to help would-be designers take their first step towards imagining and creating their own wings.



CHRIS HEINTZ LIGHT AIRCRAFT DESIGN HISTORY: 1974 - 2014



Zenith Aircraft Company produces kit aircraft under license from designer Chris Heintz. www.zenithair.com www.zenith.a



Quality Aircraft Since 1974

When Chris Heintz attended his first EAA Oshkosh Fly-In in the summer of 1973 with his prototype CH 200, the high level of interest in the design inspired him to immediately begin translating the drawings and manuals for the aircraft. It wasn't long before buyers of plans called to ask about the availability of parts, so Chris started cutting and bending aluminum in the basement of his family home in Richmond



Hill, a suburb of Toronto. When Chris' basement got too crowded, he re-assembled a recycled two-car garage in the backyard.

Within a year Chris had outgrown his

garage, and rented a commercial building in the town of Nobleton. This would be home to Zenair for the next ten years, and the birthplace for the CH 100 series, the CH 300 and the Zipper ultralight series. Wooden Zenair propellers were manufactured there, as well as the first all-aluminum Zenair floats. The first CH 600 was built there, as was the prototype STOL CH 701.

With the advent of new ultralight regulations in Canada, which allowed manufacturing ready-to-fly aircraft, it was time to look for a new, larger home, preferably on an airport so newly finished aircraft could be test flown on site. A site was found on the Huronia Airport and Chris set out to design and build the main building which has been home to Zenair ever since.

From the start, Zenair' has remained true to its founder's dream: to offer a range of simple



and affordable aircraft kits suited to the skills and abilities of the amateur builder and pilot. Over the last 40 years, Zenair has produced kits for single-seat aircraft, two-, three- and four-seat aircraft, low-wing and high-wing designs, ultralights, and most recently, certified VLA and LSA aircraft.

With Chris retired, Zenair Ltd. – under the leadership of Chris' sons Michael, Nicholas, and Matthew – continues to develop, manufacture and sell Heintz-designed airframe and float kits around the world. Zenair is now one of the most experienced and well-established light aircraft kit manufacturers in the world, with over 10,000 kit builders. Visit www.zenair.com to learn more about Zenair.







ZENAIR CH 640

The ZODIAC CH 640 was designed for kit builders seeking a modern low-wing allmetal four-seat aircraft at an affordable price. While there are hundreds of fancy two-seat kit aircraft designs available, there are remarkably few convincing four-seat models for homebuilders to choose from. The ZODIAC CH 640 fits in the gap between low cost "puddle-jumpers" and expensive high performance "rocketships," making it a logical choice for many pilots and builders.

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The ZODIAC CH 640 is a conventional fourseater, with a 2+2 seating configuration. Its 1,000 lbs of useful load mean it is a truly travel-friendly aircraft. The design features a fixed tricycle landing gear, large dual gull-wing doors, a wing span of 31.5 feet and an overall length of 23 feet. Most CH 640's flying today are powered by the common 180-hp Lycoming O-360 engine.

Available from Zenair as a kit, the CH 640 has handling characteristics that most pilots will be familiar with; it even comes with a dual yoke control system instead of the control sticks typically found in most kit designs. The aircraft is not a flyweight homebuilt; its weight makes it well suited for pilots transitioning from similar-sized Cessnas or Pipers. Its roominess and impressive payload make the Zodiac CH 640 an ideal aircraft for longer cross-country trips.

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PERFORMANCE Lycoming O-360, 180 BHP	Take-Off Weight: 1,650 lbs. Typical Load: 518 lbs.		Gross Weight: 2,200 lbs. Useful Load: 1,000 lbs.		
MAX. LEVEL SPEED	155 MPH	250 km/h	145 MPH	233 km/h	
CRUISE SPEED (75%)	140 MPH	227 km/h	136 MPH	227 km/h	
STALL SPEED (flaps)	40 MPH	65 km/h	47 MPH	76 km/h	
STALL SPEED (no flaps)	50 MPH	81 km/h	58 MPH	93 km/h	
RATE OF CLIMB	1,400 fpm	7.0 m/s	950 fpm	4.8 m/s	
SERVICE CEILING	16000+ Ft.	4880+ m.	12,800 Ft.	3,900 m.	
ENDURANCE (Std.)	3.75 hours	3.75 hours	3.75 hours	3.75 hours	
RANGE (Std)	525 miles	845 km.	510 miles	820 km.	
TAKE-OFF ROLL	950 Ft.	260 m.	990 Ft.	300 m.	
LANDING ROLL	800 Ft.	244 m.	1,150 Ft.	350 m.	

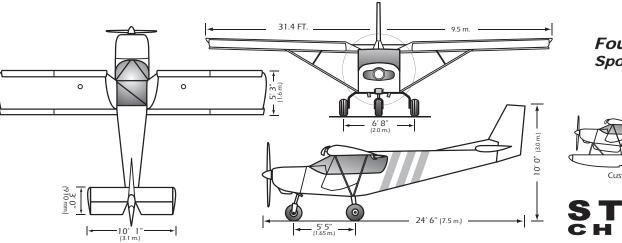


The new sport utility **STOL CH 801 Super Duty** is the latest evolution of the all-metal, four-seat STOL CH 801 design. With an almost 3/4 US ton useful load, there isn't much you'll have to leave behind if you're flying the STOL CH 801-SD. Like it's two-seat "little brothers" to the south, the STOL CH 801 was developed to provide excellent short-field performance with maximum payload, while remaining easy to assemble, operate and maintain. If your requirements do not include quite so much gross weight, but still great four-seat STOL performance, the previous

STOL CH 801 Heavy Duty is still available.

Designed for much more than occasional leisure flights and weekend outings, the CH 801 has been optimized for intense and repetitive use at full loads. While the classic STOL CH 801 was initially intended for recreational users in off-airport environments, Zenair developed the now-standard Heavy Duty package following extensive field-testing and based on the feedback from harsh overseas agricultural users. The new STOL CH 801-SD continues this tradition, adding more wing and tail area, more useful load, a tougher gear system and airframe, and the option to use more powerful engines.





Four Seats Sport Utility



STOL CH 801

PERFORMANCE & SPECIFICATIONS

LINI ONMANOL & OI LON IOATIONO					
PERFORMANCE Lycoming O-360, 180 BHP	Typical Load: 500 lbs. 1,650 lbs.	Gross Weight: 1000 lbs 2,200 lbs.	SPECIFICATION FIGURES Standard Configuration		
TAKE-OFF ROLL	290 Ft.	390 Ft.	LENGTH	24 Ft. 6 In.	7.5 m.
MAX. LEVEL SPEED	112 MPH	110 MPH	HEIGHT (rudder tip)	10 Ft. 0 In.	3.0 m.
CRUISE SPEED (75%)	106 MPH	105 MPH	WING SPAN	31 Ft. 4 In.	9.5 m.
STALL SPEED	35 MPH	39 MPH	WING AREA	167 Sq. Ft.	15.5 m.sq.
RATE OF CLIMB	1,200 fpm	720 fpm	EMPTY WEIGHT	1,300 Lbs.	522 kg.
SERVICE CEILING	16,000+ Ft.	14,000 Ft.	GROSS WEIGHT	2,200 Lbs.	975 kg.
RANGE / ENDURANCE (Std.)	320 miles / 3 Hrs.	315 miles / 3 Hrs.	USEFUL LOAD	900 Lbs.	455 kg.
EXTENDED RANGE OPTION	640 miles / 6 Hrs.	630 miles / 6 Hrs.	G LOAD (Ultimate)	+5.7 / -2.8 G	+5.7 / -2.8 G

Above performance figures with the Lycoming O-360 engine (180 BHP: 420 lbs. with accessories and fixed-pitch Sensenich 76-EM8-0-54 metal propeller). Standard atmosphere, sea level, no wind. Performance and specification figures based on prototype flight test results; subject to change without notice. Suitable power range: 150 - 240 BHP, up to 440 lbs. installed. Different engines and options will affect performance and specification figures.



The STOL CH 801 is at home on rough open fields as well as on city airports, providing both the versatility of a four-seat aircraft and the capability of a cargo-hauling bush-plane. Since

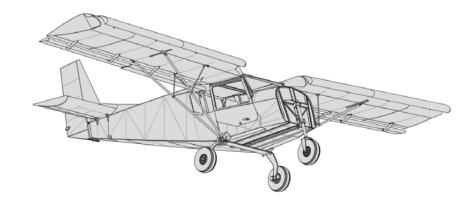
it was developed as a "sport utility" aircraft, highspeed performance has been traded for outstanding high-lift capabilities to offer astonishingly short takeoff and landing performance with a large cabin area and heavy payload. Many aircraft are faster than the STOL CH 801, but none carry more payload with such short-field capabilities and such spectacular slow flight characteristics.



The STOL CH 801 has been officially evaluated and recognized in a number of countries; it has been granted special-use typecertificates in both

Asia and the Middle-East, allowing it to be used there for commercial spraying.

Built of durable all-metal construction, the workhorse STOL CH 801-HD is equipped with simple systems to maximize weight savings and reliability. Its slow stall speed makes the aircraft easy to fly and give it spectacular short-field performance as well as overall versatility. Designed to provide the durability and ruggedness expected of an "off-airport" bush-plane, it offers many modern features for a truly versatile and utilitarian aircraft.















Full Lotus floats are extremely tough and shock resistant thanks to a sturdy polycarbonite shell. Thus, Full Lotus floats can be beached on rocky shores without worry, and can also function as skis, allowing operation even in very soft snow thanks to their large footprint. Also available in amphibious configuration, Full Lotus floats are perfect for the pilot seeking maximum durability and versatility.



Enjoy the Thrills and Freedom of **FLOAT FLYING**

Interested in adding a whole new perspective, and exciting challenges, to recreational flying? Enjoy the thrills, fascination, and freedom of float flying! With Zenair Floats, converting your existing sport plane to a seaplane is surprisingly easy and affordable. Available in a wide range of sizes, there are Zenair Floats to fit your aircraft.

Zenair Floats use the same easy aluminum construction as the planes, and feature individual interior compartments separated by full-size bulkheads, rugged custom extruded aluminum keels, and full-length walkway stiffeners along the top. Sleek aerodynamic design minimizes drag and allows the floats to carry their own weight in flight, so useful load remains the same as on wheels. The design incorporates a hydrodynamic "step" which allows separation from the water in the shortest possible distance; take-offs from water use only a few hundred feet!

Using modern aviation aluminum alloys and proven design techniques, Zenair Floats are very durable, corrosion resistant, and easy to assemble from quick-build kits. Zenair floats have been installed on many different aircraft, from homebuilts to ultralights to factory-built models, and are in use around the world in both fresh- and salt-water environments.

In addition to standard floats, Zenair offers amphibious floats that feature extra-large tires, perfectly suited for grass strips. Both configurations are available in multiple sizes in kit form through Zenair.





CH 650, as well as providing support for our customers all over the world. Zenith Aircraft Company has the exclusive rights from Chris Heintz to manufacture and market Zenair kit aircraft designs in the United States.





VISIT THE FACTORY

RUDDER WORKSHOPS

If you're not sure whether a Zenith aircraft is right for you, come see us in person at the factory in Mexico, Missouri! We're always happy to take potential builders on a tour of the factory, as well as a demo flight in the demonstrator aircraft of their choice.



On the factory tour, one of our expert staff will walk you through our entire shop floor. The experience will take about 20-30 minutes and lets you see first hand the start-to-finish process of manufacturing a Zenith Aircraft Kit.



While the factory tour is a great way to get to know us, a demo flight is a great way to get to know the airplanes. Our test pilot will demonstrate some of the capabilities of the aircraft, as well as the normal operating envelope and flight characteristics.





If you plan on visiting our factory, please call us in advance and make an appointment in order to ensure the availability of our tour guide and demo pilot.

You know you like the thought of building your own unique airplane, but you might feel less confidence in your technical building skills. A rudder workshop at the Zenith factory is the perfect opportunity to get the handson experience you need to prove you can do it. Hundreds of people have found out just how easy it is to build a Zenith kit at these workshops, and you can too! For only the cost of the rudder component kit, you will have the opportunity to build the complete rudder for your airplane under the expert guidance of Zenith Aircraft staff, completing it in just two days! Small group sizes mean you will receive oneon-one help and advice from the same people who design, build, and answer questions about the kits.



"My father-in-law and I participated in the workshop this past weekend. I was very impressed by the aircraft, the facility, and especially the staff. You made learning a new skill intensive and rewarding... Congratulations on knowing exactly how to treat the novice builder...again, thank you." - FM



If you can't make it to the factory, the same low-cost rudder kit is available to order. It serves as an excellent introduction to the general construction of the kit. You'll need your own tools, but those necessary to build the rudder kit are very simple and inexpensive.







Zenith's Annual Open Hangar Day and builder fly-in gathering is held every fall at the factory in Mexico, Missouri. The event features seminars and workshops for builders, pilots, and Zenith enthusiasts, as well as a builder's dinner. It's a great opportunity to meet like-minded people and see their planes.







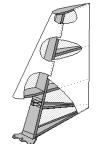






Building your own aircraft is going to be one of the most challenging undertakings you'll ever accomplish, but all the hours of work will pale when you experience that first flight in an airplane that is truly your own. Imagine, you'll be enjoying the thrill of flying an aircraft that you've built yourself! Few people ever experience the joy that flight has to offer. Even fewer enjoy that feeling in an airplane they've built with their own hands.

Zenith Aircraft Company has been in the kit aircraft industry for over twenty-five years. Over all that time, our focus has always been developing aircraft easy for an amateur to build and exciting for a recreational pilot to fly, as well as offering customer support that is second-to-none. There is no substitute for experience, and we use ours every day to make sure your foray into the world of kit aircraft is as enjoyable and fulfilling as possible.



To start making your dream a reality, schedule your factory tour and demo flight today. Better yet, combine your visit with a rudder workshop and get the first part of your airplane built in one funfilled weekend! Thousands of people from all different backgrounds and skill levels have built their own Zenith airplane. All you really need is the desire to do it and

the willingness to learn. If you start today, before you know it you will be climbing to the skies in your very own airplane. It will truly be your own, every little detail familiar, because you built it with your own two hands. The sky is waiting. See you there.



Check our Facebook page for daily updates: www.facebook.com/zenithair



Build It. Fly It!





ENIT







Sport Pilot Ready Awesome Visibility Wide & Spacious Cabin **Great Short Field Performance** Engine Choices (85 - 160 h.p.)



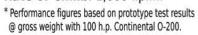
New instrument panels are available with modern avionics to meet your requirements

Zenith Aircraft around the world: www.zenair.com

STOL CH 750 Performance*

Take-Off Roll: 100 feet Cruise: 100 mph

Stall (flaps down): 35 mph Rate of Climb: 1,000 f.p.m.







The Complete Kit with extensive CNC-cut match-drilled pilot holes.

Modern Light Sport Utility Aircraft: The STOL CH 750 is a modern light sport airplane, with standard tricycle gear configuration and easy cabin access from both sides through the enormous swing-up bubble doors.

> Check our website for complete pecifications, pricing, and builder resources

Zenith Aircraft Company

1881 Airport Road, Mexico, Missouri 65265 USA

Telephone 573-581-9000

Room. With A View.

Zenith CH 650



New Features with Modern Stying: The CH 650 B is a second-generation light sport kit aircraft developed specifically for sport pilots, and is the latest model from aeronautical engineer Chris Heintz. Build your own CH 650 aircraft from a complete kit, component kits, or from blueprints only.



Assemble the airframe kit in less than 500 hours with simple hand tools. Standard kit features include dual welded-aluminum wing fuel tanks, factory-riveted wing spars, assembly hardware, and more!

Come gain hands-on building experience at one of our monthly factory workshops. Visit the factory for a demo flight and factory tour!

Build It. Fly It!

Exclusive online builder community.

www.zenith.aero



New engine choices from UL Power: 97 - 130 h.p. Direct drive, air cooled, multi-point electronic fuel injection with FADEC. www.ulpower.net

Zenith Aircraft Comany: 1881 Airport Road, Mexico, Missouri 65265 USA Tel: 573-581-9000

www.zenithair.com



To learn more about Zenith Aircraft Company, and all our exciting kits, visit http://www.zenithair.net. You can also stop by http://www.zenith.aero, the online community for Zenith builders and flyers, or check us out on Youtube and Facebook. We are always available by phone or email to answer any questions, or to provide additional information on any of our planes. Go to www.zenithair.com/maillist.html to subscribe to our email list and get the latest Zenith updates.

Come visit the factory! Call ahead a day or two to ensure we can schedule a demo flight for you. Hours are 6:30-5 Central, Monday through Friday.

Contact: info@zenithair.com 573-581-9000 Zenith Aircraft Company 1881 Airport Road